

PATENT VAMPIRES PREY ON HELPLESS INVENTORS

SHE is eighty-six years old now, and, of course, the money will be acceptable. But what she said to all who called to congratulate her upon the decision of the court, after years of litigation to assert her husband's patent rights to the common types of films, which have been manufactured by the Eastman Kodak Company, was: "Tell my friends that I am not anxious about the money, except as a just recognition of my husband's genius."

ent system is the best in the world. And so it is, for lawyers."

Mr. Leonard had to pass through twelve interferences before he succeeded in establishing his rights to his system of motor control. He spent not less than \$75,000 of his own money in this pleasant indoor sport of fighting interference proceedings in the Patent Office, in every one of which he was the first man to file his application.

An "interference" is a judicial inquiry by the Patent Office between two rival inventors of the same thing for the purpose of ascertaining who is the original inventor; for under our patent law, as it stands to-day, the patent must issue to the first inventor. The entertainment may last for weeks, and the lawyers who represent the conflicting inventors charge from \$25 to \$100 a day for their services. Not

The Ease with Which a Certain Class of Patent Attorneys, as Well as Some Unscrupulous Capitalists, Have Diverted Profits on Ideas from Their Originators Is Due to Defective Laws, Which There Is Urgent Need, President Wilson and Experts Agree, of Changing Materially.

pressive total not 10 per cent have ever netted the patentee the fees that he paid to the Patent Office or to the attorney.

Assuming that you are of the intelligent minority, that you have been assailed by an idea worth millions of dollars and that you are in arrears for your last week's dancing lessons, if your idea brings you in contact with one or more tremendously large and domineering manufacturing institutions the proceedings will probably be something as follows:

You will tell the head man of the concern what it is that you can do with the machine for which you have asked the United States government to grant a patent. The head man will ask you if you smoke, and you may be sure the cigar will be a good

practically the work of your contrivance. The model is to be just enough different from yours to make your next interview interesting.

When you call again the office boy is extremely polite, and you cannot but feel a glow of pride as you are ushered into the private office of the man who is at the head of so great a concern. You are about to receive some of the reward for which you have toiled so many years.

The way to invent is to think, and keep on thinking. A lazy inventor has never yet been born. No day laborer works as many hours a day. A press agent for a musical comedy prima donna cannot show a better record for diligence of both the body and mind. Early in life you turned to invention, and learned that the mastering of difficulties was one of the elements of the first principle underlying that science.

You have passed through the stage when all your friends said that what you started to do was impossible. No one has believed in you. It has been agony. You are now on the eve

connected with that department of art or industry in which the need exists, excite your mind with the belief that you can provide means to remove the difficulties and end by solving the problem.

But he adds that his concern has been at work in its laboratory for many months on the solution of the same problem, and that, while it had not succeeded to the same extent as yourself, perhaps, in removing the obstacles, yet his company had done very well indeed, and probably in another month or two would be able to announce to the world the perfection of a satisfactory machine.

You might better, he says, reconsider the matter and agree to sell out, because, he says, if you persist in your determination to hold out against his concern, one of the greatest in its line in the world, why, it grieves him to say it, but there will really be nothing left for his company to do but wait and watch developments in the Patent Office.

The flavor of the cigar is spoiled for you. You have a taste in your mouth of ashes. You feel a little

You talk to your friends and try to induce them to help you raise a considerable sum of money to fight the big concern, whose head man has made you a proposition to take over your rights in your invention, and at the same time find a place for you on the payroll at a living salary, the stipulation being that you will turn over to the company all future inventions which may spring from your brain.

You are hungry and your friends are backward. You cannot blame your friends. They have been reading the papers. They know that the Wright brothers unquestionably first demonstrated the possibility of mechanical flight. Whatever rights, powers and privileges were earned by them should, of course, have been theirs, safe from all attack as soon as they had complied with legal requirements in taking out patents on their machine.

What they did get on complying with those requirements, experts point

ventor. All the facts are known to the writer.

This is detrimental to progress in the United States. No country can compete with the rest of the world except by invention.

If you invent something for use on railroads and you live east of the Mississippi River, you are referred to a Mr. Fisher, in Washington. He represents the Eastern Railroad Association, made up of some 250 corporations, each chipping in a small contribution to sweeten the kitty so as to protect all of its members "against unjust claims made for patented inventions."

Ninety-one automobile companies have adopted the same method



He was the Rev. Hannibal Goodwin. When he invented the sensitized film, while looking for a substitute for the breakable glass plate, he was rector of the House of Prayer, in Newark. His laboratory was in the attic of the old brick rectory near the church. He made his first application for a patent in May, 1887. The patent was not granted until September, 1898. In the mean time the Eastman company used the films and refused to recognize that the pastor-patentee had any rights in the matter. And then Mr. Goodwin died on December 31, 1900—in poverty.

Mrs. Goodwin lives with her daughter in a frame house in Newark. The decision of the United States Court of Appeals may, after all these years of modest outlook, mean several million dollars to them. The daughter is sixty-one years old.

THE MELTING INFLUENCE OF LITIGATION COSTS.

Their share of the postponed reward will be materially lessened by the fact that in order to meet the costs of litigation the inventor was forced to assign a large share of his interest to others. It is hard for either of these patient women to realize that the high hopes of the big-hearted minister, who used to tell them so frequently that they would all be rich some day, have at last come true. Which brings us to an important thing.

President Wilson has given warning to the people of the United States of the importance of these questions in the following language:

"Do you know, have you had occasion to learn, that there is no hospitality for invention nowadays? . . . I am not saying that all invention has been stopped by the growth of trusts, but I think it perfectly clear that invention in many fields has been discouraged, that inventors have been prevented from reaping the full fruits of their ingenuity and industry, and that mankind has been deprived of many comforts and conveniences, as well as the opportunity of buying at lower prices."

"One of the reforms waiting to be undertaken is a revision of our patent laws."

H. Ward Leonard, president of the Inventors' Guild, a very distinguished organization, of which Mr. Edison is a member, said to the writer a few days ago: "Under existing methods of trying patent causes an inventor-patentee of average means could not at his own expense carry to a conclusion an average litigation against a wealthy opponent. Therefore, a few wealthy concerns usually acquire nearly all important patents in their field."

"This works great damage to the nation. Competition by invention is the only efficient form of competition. Our present laws result in a restraint of competition and produce a tendency in inventors to seek protection for their inventions by trade secrets or else to cease inventive work."

WARD-LEONARD SYSTEM OF MOTOR CONTROL.

Mr. Leonard is the inventor, among other things, of the Ward-Leonard system of motor control. Ask the men in the navy what they think of it for doing the heavy but delicately exact work of turning the gun turrets on the men-of-war. The Otis company paid him \$120,000 for a license to use the Ward-Leonard system in starting and stopping the motors on its elevators. These facts are mentioned so the layman may understand that whatever Mr. Leonard chooses to say on the subject of revision of our patent laws is based on experience, not all of which has been said.

"There is probably not an experienced inventor in the United States," says Mr. Leonard, "who would not prefer one of the foreign patent systems to our system, unless he is really a representative of one of the large corporate interests. Yet practically all patent lawyers will tell you that the American pat-

only is the inventor called upon to incur an expenditure which may bankrupt him, but the interference may by no means conclusively establish his priority.

Time and again inventors have urged that these expensive recreations be abolished; that patents shall be granted to those who are first in the Patent Office. This would mean a radical change in the law, but a change that would prevent many a wilful abuse.

Crandall, who obtained fame through his toy building blocks, owned a large glass ball which seemed possessed of life, always rolling where it was not wanted. This was the small circumstance which led to his invention of "Pigs in Clover," by which he cleaned up over \$40,000. There were no interference proceedings in this case. The inventor of the roller skate made nearly \$1,000,000, although only during the last few years of his patent. The door of adversity is less ajar if you invent something on this order, or a lead pencil with rubber tip, or a dancing jim crow, or a system to expedite the tedious operation of milking a cow.

CERTAIN PATENT ATTORNEYS DISGRACE CALLING.

Because of our odd patent procedure a class of patent attorneys has arisen who may be regarded as legalized swindlers, and with whom the Commissioner of Patents, despite his best efforts, is powerless to cope. These men write glittering accounts of the prizes won by American inventors, and succeed in influencing great hordes of fellow citizens to believe that the initial fee of \$15 will result in making an Archimedes of each one of them. This is misleading.

Over one million patents have been granted in this country (and this is more than double the number issued by any other nation), but of that im-

one. He knows that your idea is a good one, that if you have solved the problem and he can get you to sell out at a reasonable figure his company will make hundreds of thousands of dollars out of it—perhaps more.

He says your invention is very interesting, and adds that his company has been experimenting along similar lines, with the result that it has about perfected a machine to do practically everything you claim for your own invention, although in a somewhat different way, perhaps. He asks what sum you will take for your patent. You inform him you do not intend to sell outright, that you will do business only on a royalty basis. The big man asks you to think it over, and invites you to call again.

As you are arranging your perturbed thoughts in the elevator on the way to a luncheon of crackers and milk the man you have just seen is talking with a bright young chap who has entered in response to the buzzer from the main office. The young man has been out of school perhaps a year, perhaps six months. The boss tells him he wants a model made at once of a machine to do

of having your invention come into commercial use, and the revenge is going to be nearly as sweet as the money with which you intend to buy your wife a dozen silk dresses to make up for the years in which she has turned her cotton ones inside out.

THE HARD MAN AND THE QUESTION OF ROYALTY.

The conversation turns to the price at which you will turn over all rights in this invention and all future inventions. You stick to your determination to arrange for its disposal on the basis of royalty. The business man is very kind and courteous. He compliments you on your wonderful ability to study the need of the public, learn the difficulties

dizzy. In a vague kind of way you realize what you are up against. You are up against the need for \$100,000, and maybe another on top of it, and you are not at all sure but that the great corporation, with its fathomless resources, will be able to throw you on the scrap heap after the long legal fight is finished.

The man has hinted at interference proceedings. And you are also familiar with what you may expect in the matter of delay between the filing of an application for a patent and the granting of a patent. This is not always to be charged to the attorney in the case. The highly complex and involved procedure of the Patent Office is responsible for many of them.

It is not long until you begin to learn that the more patents you have that are infringed by these great corporations the less chance you have to deal with them on any royalty basis. You remember that there are only a few inventors who have been able to paddle their own canoes. Most of the good ones have, against their will, been gobbled up, and are now working on a salary for men who are making several times that salary out of their inventions.

out, was what every inventor gets under our outrageously imperfect patent laws—a paper which permitted them to defend their invention if they could in maddeningly protracted and enormously expensive litigation against anybody who chose to infringe or copy it."

THE MELANCHOLY END OF SOME FINE AMBITIONS.

Your friends are wise, perhaps, in advising you to get on the payroll. At least, they are careful not to spend thousands of dollars of their money, from which they would get nothing except an opportunity to sit in various courtrooms in different states of the Union, watching high priced attorneys wear frocks of deep abstraction while remarking "heretofore, to wit," and quoting Shakespeare, Blackstone, Chitty, Archbold, Joquin Miller, Kent, Tupper and Christy Mathewson, and so on for forty-six hypotheses.

You end by taking the job on the terms mentioned, and you live to see the company make hundreds of thousands of dollars by reason of your invention. This is a true story. It has actually happened to one in-

practically. Where does the individual inventor get off?

No body of men, says Mr. Leonard, is more difficult to get into unanimity of thought than inventors. Also, no group is less gregarious. The public should, he says, differentiate between intellectual and material monopoly. An invention is the personal, intellectual property of the inventor, it is his. He created it. A monopoly is exclusive right to a thing that some one else has created. In other days, he points out, highways were frequently controlled by corporations, which reaped a toll from every traveler. This was monopoly. The man who invented the macadam system or the cantilever was not a monopolist.

Edison has succeeded not because of but in spite of our patent system. His greatest invention was the incandescent electric light. Mr. Leonard says he received only a part of the money from it to which he was entitled, owing to the deprivation of his rights by the courts. An old man, of whom you may never have heard—it is a 10 to 1 shot you never did—named Goebel, from Western Pennsylvania, was brought into court in St. Louis and declared by clever attorneys to be the inventor of the incandescent electric light, which has given greater impetus to civilization than kerosene and golf combined. He was an itinerant astronomer, with a rickety wagon and a decrepit horse. The judge in St. Louis was so impressed by the lawyers that he refused to grant an injunction for Edison, although thirty-odd courts in the East had done so.

RECOGNITION THE INVENTOR'S FIRST THOUGHT.

Mr. Leonard says the first thing a real inventor thinks of is recognition for his contribution to the welfare of the world. And then, of course, money, which is of secondary importance, because a good inventor must be independent.

"If we find that corporations are better able," said Mr. Leonard, "because of their vast resources or what not to make improvements such as the incandescent electric light, then let us abandon the patent system, which only recognizes individuals. If these large corporations never can be able to make the advances in the arts that individual inventors, properly protected, can do, then let us go back to what was intended by the Constitution, and protect them from extermination by the power of money."

Mr. Leonard has written a bill at the suggestion of Thomas Ewing, Jr., Commissioner of Patents. If this bill had been in effect the Rev. Mr. Goodwin and his family would have received 5 per cent on all sales from the moment the minister displayed to the court his patent for the invention, in 1898, until the present time. This would have made millions for the Goodwin family early in the game.

Instead of being, as now, impotent when dealing with great corporations, the inventor—were we talking of the real inventor, a type not at all like the one the stage has made popular, but a person who would succeed in anything he undertook on reason of divine fire and personal perspiration—such a man, then, because of the 5 per cent would have the money with which to carry on the very litigation of which the great corporations are now so fond.

And a judge would no longer ask as was done in one of Mr. Leonard's suits: "Who is this Mr. Leonard? Is he a man of means, or an inventor?"

THE WORLD'S DEBT TO GEORGE WESTINGHOUSE

Continued from first page.

said; "they"—pointing to the clerks—"don't want it."

"Take what?" he asked, only half recalled from his plans.

"This magazine. I'm putting in my vacation getting subscriptions."

THE AIRBRAKE IDEA TAKES DEFINITE FORM.

"Mr. Westinghouse was always generous and good natured. Quite naturally, therefore, he 'took' it, abstractedly, never dreaming of the tremendous results that were to flow from this slight kindness. The little girl thanked him and disappeared. She never entered his life again. Even her name is forgotten and the name of the magazine."

"The magazine came along in due course of time, and Mr. Westinghouse was busy turning it over on September evening, when his attention was riveted by a small item that described the building of the Mont Cenis tunnel. It told of the operation of the drilling apparatus in that tunnel at a distance of 3,000 feet from the air compressor. The possible employment of compressed air in the operation of the brake flashed across his mind.

"I have it," he exclaimed, and, throwing down the magazine, he began to sketch roughly the plans of

the first airbrake as it was afterward applied."

Mr. Bagnaley, in Pittsburgh, undertook to defray the cost of constructing the apparatus needed to make a demonstration. Railroad officials of the Pennsylvania and what was then known as the Panhandle railroads were invited to inspect the apparatus and witness its operation. The Steubenville accommodation train, consisting of a locomotive and four cars, was placed at the disposal of Mr. Westinghouse.

THE VALUE OF THE INVENTION IS PROVED.

"Upon its first run after the apparatus was attached to the train," said Mr. Westinghouse in telling the story to the American Society of Electrical Engineers a short while ago, "the engineer, Daniel Tate, on emerging from the tunnel near the Union Station in Pittsburgh saw a horse and wagon standing upon the track. The instantaneous application of the airbrakes prevented what might have been a serious accident, and the value of this invention was thus quickly proved and the airbrake started upon a most useful and successful career."

His next big project was that of piping natural gas into Pittsburgh, and he gave the credit to Mrs. Westinghouse. She wanted gas in her

Pittsburgh home, and Mr. Westinghouse began experimenting with a well in the back yard. Gas was struck, and as a result of his experiments he perfected a scheme to bring gas to the big manufacturing centers in small pipes at high pressure and distribute it in large pipes, in that way reducing the pressure to the safety point. He put an end to the disastrous explosions, leaks and "blowoffs."

The inventor next turned his attention to electricity. One day he read of the experiments being made by the English electricians, Gouard and Gibbs, with the alternating current by which electrical energy could be sent great distances. Westinghouse at once sent Franklin Pope to England to buy the American rights to the invention. This done, he seized on the idea, developed it, and from that time date the great strides made in the use of electrical energy.

He had acquired the control of some important electrical patents, and there were fireworks at the time of the World's Fair in Chicago, in 1893, in consequence. He took the contract for lighting the fair at a price \$1,000,000 less than had been offered by other companies. They, in order to crush him, endeavored to persuade the exposition authorities that he could not secure the bonds

for performance of the contract. He furnished three separate bonds equal to the amount of the contract. After the contract was taken, injunctions were obtained to prevent his using the Edison patents in the manufacture of the lamps, as well as the air pumps for exhausting the bulbs, which were at that time supposed to be the best.

So Mr. Westinghouse himself invented another form of lamp, known as the "stopper pattern," and invented and built machines for the grinding of the stoppers and the necks of the bulbs. And the \$1,000,000 left over and distributed to the stockholders when the fair was closed was just the amount that Mr. Westinghouse saved those stockholders by taking the contract for the lighting.

"The contests through which he has passed since 1907," says Arthur Warren, who has been closely associated with the inventor for the last seventeen years, "have been bitter, and the shafts have pierced deep into his soul, but they have not embittered him; they have on the other hand added to the stature of his superb integrity and have brought to him tributes of admiration from men of all classes and callings."

Speaking of his personal life and qualities, the Rev. Dr. Fisher said of Mr. Westinghouse:

"In his early life he became a professing Christian. That faith and the influences of his early home under strong Christian truths were never lost. He was pure in life, chaste in speech, reverent toward women, courteous and kindly toward all."

One day during a thunderstorm, before the telephone had been perfected, Mr. Westinghouse asked the office boy in the Allegheny works to call up somebody for him on the wire. The boy hesitated, just a trifle, because he knew that a fellow was liable to be shocked if he used the telephone in such weather.

"What's the matter?" Mr. Westinghouse asked the boy. "Are you afraid to use the telephone?" Mr. Westinghouse said it kindly. His mind was on something important, and he was very anxious to get in touch with a certain man at once. The boy put the receiver to his ear and received a distinct shock. It didn't amount to anything, just enough to make him jump a little. Mr. Westinghouse was upset about it, and twenty-four hours later called up the Allegheny works from the Pittsburgh office to inquire if the boy was all right.

That boy is one of the big business men in the country to-day. He thinks he knows a thing or two about why everybody admires George Westinghouse.

